# **Construction Notes**

- 1. THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST 24 HOURS PRIOR TO STARTING ANY OF THE WORK SHOWN HEREON.
- 2. ALL AREAS NOT BEING PAVED OR RECEIVING BUILDING COVERAGE SHALL BE STABILIZED IN ACCORDANCE WITH THE PLANS APPROVED BY THE HOWARD SOIL CONSERVATION DISTRICT. THE CONTRACTOR SHALL NOTE THAT IN CASE OF DISCREPANCY

BETWEEN ANY SCALED DIMENSIONS AND THE FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED DIMENSIONS SHALL GOVERN 4. CONTRACTOR SHALL MEET ALL EXISTING IMPROVEMENTS

SMOOTHLY FOR LINE, GRADE AND FINISH. 5. ALL WORK SHOWN ON THESE PLANS SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS AND OF THE MARYLAND STATE HIGHWAY ADMINISTRATION AND THE HOWARD COUNTY PLUMBING CODE, UNLESS OTHERWISE NOTED.

6. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THIS PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PERFORM SUCH WORK THE COST OF SUCH WORK SHALL BE INCLUDED IN THE BASE BID. 7. THE CONTRACTOR SHALL INSPECT THE SITE TO DETERMINE IF ANY TREES, PAVING, ETC. ARE TO BE REMOVED PRIOR TO PLACING

THE LOCATIONS OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE LOCATIONS ARE TAKEN FROM LOCATIONS. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1 800-257-7777 A MINIMUM OF 5 WORKING DAYS PRIOR TO DIGGING. THE CONTRACTOR SHALL CONFIRM TO HIS OWN SATISFACTION THE LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION OR PLACEMENT OF MATERIALS, IF ANY CONFLICT IS FOUND BETWEEN UNDERGROUND UTILITIES AND THE PROPOSED LOCATION OF ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT G. W. STEPHENS AND THE OWNER OF THE UTILITY IMMEDIATELY. ANY DAMAGE OR DISRUPTION OF SERVICE SHALL BE AT THE EXPENSE OF THE CONTRACTOR. RELOCATION OF ANY EXISTING UTILITIES, IF NECESSARY, SHALL BE AT THE EXPENSE OF THE OWNER. THE CONTRACTOR SHALL COORDINATE RELOCATION OF THESE FACILITIES, IF NECESSARY.

CONTRACTOR SHALL PROTECT ALL EXISTING TREES OUTSIDE THE LIMIT OF DISTURBANCE AT ALL TIMES DURING CONSTRUCTION 10. CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS NOT SCHEDULED FOR REMOVAL OR DEMOLITION. COST OF REPAIR TO EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE BASE BID. ALL EXISTING SITE FEATURES NOT BEING RETAINED SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED LOCATION. ANY DAMAGE TO OFFSITE ROADS, RIGHTS OF WAY, OR ADJACENT PROPERTY SHALL BE REPAIRED IMMEDIATELY AT THE EXPENSE OF

11. THE CONTRACTOR SHALL CLEAR THE PROJECT SITE OF ALL TREES, PAVING, STRUCTURES, ETC. WITHIN THE CONSTRUCTION AREA UNLESS OTHERWISE NOTED ON THE PLAN. 12. ONLY SUITABLE MATERIAL SHALL BE USED AS FILL AND ALL FILE SHALL BE PLACED AND COMPACTED AS SPECIFIED IN THE SOILS SHALL BE APPROVED BY A GEOTECHNICAL ENGINEER. 13. CONTRACTOR SHALL PROVIDE MINIMUM 4 FOOT BENCH AT EDGE OF PAVING IN FILL AREAS. MAXIMUM SLOPE OF BENCH SHALL BE

4% (1/4 IN PER FOOT). 14. MAXIMUM SLOPE SHALL BE 2 HORIZONTALLY TO 1 VERTICALLY.

15. CONTRACTOR SHALL PLACE 4" MINIMUM TOPSOIL IN

LANDSCAPE AREAS. 16. CONTRACTOR SHALL PLACE A WITNESS POST AT THE TERMINUS

OF ALL UTILITY STUBS. 17. CONTRACTOR SHALL PROVIDE A MINIMUM OF 1 FOOT OF PROTECTIVE FILL OVER STORM DRAIN PIPES DURING

18. ALL TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES." ALL STREET AND REGULATORY SIGNS SHALL BE INSTALLED PRIOR TO INSTALLATION

19. THE CONTRACTOR SHALL REPLACE ANY EXISTING BITUMINOUS PAVING OR SUB-BASE WHICH IS DAMAGED OR REMOVED DURING AND IN ACCORDANCE WITH THE SOILS REPORT AND/OR AS DIRECTED BY GEOTECHNICAL ENGINEER. ANY AREAS TO BE PAVED WHICH EXHIBIT UNSTABLE SUBGRADE CONDITIONS SHALL BE EXCAYATED TO BEARING SOIL, REFILLED AND COMPACTED.

20. IN AN AREA WHERE EXCAVATION IS NEEDED WITHIN THE ROAD RIGHT-OF-WAY, EXCAVATION MUST BE MADE WITHIN ONE (1) FOOT OF THE FINAL SUBGRADE.

21. WHERE FILL IS PROPOSED WITH IN THE ROAD RIGHT-OF-WAY, THE FILL SHALL BE A MINIMUM OF TWO (2) FEET

BELOW THE FINAL ROAD SUBGRADE. 22. ALL LIGHTING TO COMPLY WITH ZONING REGULATION SPECIFICATIONS SECTION 134 OUTDOOR LIGHTING.

23. ALL STORM DRAINS TO BE RCCP OR HDPE UNLESS OTERWISE NOTED. 24. STORMWATER MANAGEMENT IS EXISTING PER

PRIOR SITE DEVELOPMENT PLAN SDP 79-116-C. A STORMCEPTOR WILL BE INSTALLED FOR WATER QUALITY AND WILL BE PRIVATELY MAINTAINED. SECTIONS 16.1202.b.1. (1 v ) WHICH APPLIES TO THE PORTION OF THE PROPERTY ZONED NEW TOWN; AND SECTION 16.1202.6.1. (111) BECAUSE THIS PLAN DOES'NT EXPAND THE LIMIT OF DISTURBANCE FROM THE PREVIOUS SITE PLAN, FOR THE M-1 ZONED PORTION OF THE PROPERTY. 27. The Planning Board approved a reduction of the required parking setback from 25' to 22' along Berger Rand and Oakland Mills Road, as shown hereon.

**Site Data** 

1. TOTAL AREA PARCEL 'A' = 286,799.04 SQ.FT. OR 6.584 AC. +/-2. TOTAL LIMIT OF SUBMISSION = 118.919 SQ. FT. OR 2.73 AC.

3. EXISTING ZONING = NEW TOWN - EMPLOYMENT CENTER INDUSTRIAL; AND M-1

4. PROPERTY REFERENCE = LIBER 5260 FOLIO 0337 5. EXISTING USE = EXISTING OFFICE / WAREHOUSE BUILDING 'B'

6. PROPOSED USE = NEW OFFICE MMAREMOUSE BUILDING 'A' 7. BUILDING COVERAGE = PROP. 29,241.64 S.F. OR 0.67 AC. BUILDING 'A', BUILDING 'A' AND 'B' 74,801.64 SQ. FT. OR 1.72 AC. 8, % OF BUILDING COVERAGE = PROP. 10 % BULDING 'A', BUILDINGS 'A' AND 'B' 26%

9. FLOOR AREA = 29,241.64 S.F. OR O.67 AC. BUILDING 'A', BUILDINGS 'A AND 'B' 74,801.64 SQ. FT. OR 1.72 AC. 10. FLOOR AREA RATIO = 28% FOR BUILDING 'A' AND BUILDING 'B'

11. AREA TO BE PAVED PLUS BUILDING AREA = 65,261 FT. OR 1.49 AC. (LIMIT OF SUBMITTAL) 12. OPEN SPACE = 0.00

13. TOTAL AREA OF PARKING LOT = 29,621 SQ. FT. OR 0.68 AC. (LIMIT OF PROPOSED SUBMITTAL) 14. % OF PARKING LOT COVERAGE = 24 % (LIMIT OF SUBMITTAL)

15. NUMBER OF PARKING SPACES REQUIRED = BUILDING 'A' ONLY 59 1.

16. NUMBER OF PARKING SPACES PROVIDED = BUILDING'A' ONLY 129 (INCLUDING 5 HANDICAPPED)

17. AREA TO BE DISTURBED / LIMIT OF SUBMITTAL = 118,919 SQ. FT. OR 2.73 ACRES

18. AREA TO BE VEGETATIVELY STABILIZED = 20,909 SQ. FT. OR 0.48 AC

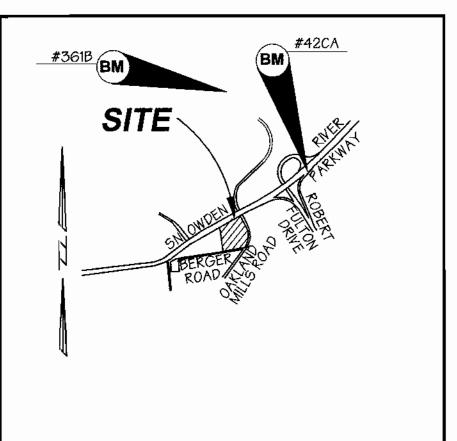
# **BENCHMARKS**

BENCHMARK #42CA AKA- N/A HOWARD COUNTY GEODETIC CONTROL APPROXIMATE N 490,946.9 E 850,088.1

N 551,695.745 E 1,362,506.381 **ELEVATION = 377.179'** 

BENCHMARK #361B AKA-N/A HOWARD COUNTY GEODETIC CONTROL APPROXIMATE N 492,599.8 E 848,386.1

N 553,348.652 E 1,364,085.211 **ELEVATION = 386.377'** 



**Location Map** 

# Site Development Plans

# Village of Owen Brown Section 2, Area 3, Parcel A Owen Brown Business Center Howard County, Maryland SDP 01-087

# **Index of Sheets**

SHEET NO. 1 - COVER SHEET

SHEET NO. 2 - EXISTING CONDITIONS PLAN

SHEET NO. 3 - SITE PLAN

SHEET NO. 4 - SITE PLAN DETAILS

SHEET NO. 5 - DRAINAGE AREA MAP AND PROFILES

SHEET NO. 6 - STORMCEPTER PLAN & DETAILS

SHEET NO. 7 - SEDIMENT EROSION CONTROL PLAN

SHEET NO. 8 SEDIMENT EROSION CONTROL DETAILS & NOTES

SHEET NO.9 LANDSCAPE PLAN & DETAILS

# **Parking Tabulation**

PARKING REQUIRED: PROPOSED BUILDING 'A' TOTAL SQ. FT. 29,241.64 10020FFICE = 29,241.64 SQ. FT. @ 2.0 SPACES/1,000

=59 SPACES

TOTAL REQUIRED = 59 SPACES

PARKING PROVIDED = 129 SPACES (INCLUDES 5 HANDICAPPED)

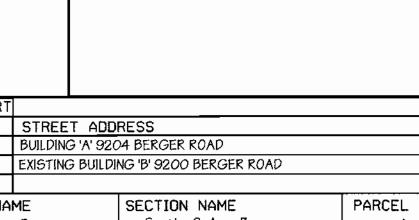
PARKING REQUIRED:

EXISTING BUILDING 'B' TOTAL SQ. FT. 45,560 25% OFFICE = 11,390 SQ. FT. @ 2.0 SPACES/1,000 75% WAREHOUSE=34,170 SQ. FT. @ 2.0 SPACES/1,000

= 23 SPACES = 68 SPACES

TOTAL REQUIRED = 91 SPACES

PARKING PROVIDED = 127 SPACES (INCLUDES 4 HANDICAPPED)



SUBDIVISION NAME PARCEL # Section 2, Area 3 Village of Owen Brown ZONE MAP | ELECT. DIST. CENSUS TRAC P.B. 25 F. 26 SEWER CODE 5241400 WATER CODE E 12 **Cover Sheet** OWNER / DEVELOPER DESIGNED BY: P.R.C.

ADDRESS CHART

ELECTION DISTRICT: 6

PARCEL NO.

PREVIOUS FILE # 'S: SDP 79-116-C , F 73-60, FDP 118-A-1, PART

DRAWN BY: K.E. 9200 BERGER BUSINESS TRUST

410-560-0300

CHECKED BY: P.R.C. REVISIONS BAVAR PROPERTIES GROUP, L.L.C. 1966 GREENSPRING DRIVE SUITE # 508 REVISED PARKING TIMONIUM, MARYLAND 21093

REVISED BUILDING. TO 100% OFFICES TABULATION BY 6.W.S DATED 10/02/01

**VILLAGE OF OWEN BROWN SECTION 2, AREA 3, PARCEL A OWEN BROWN BUSINESS CENTER** 

HOWARD CO., MARYLAND SHT. 1 OF 9 DATE: OCTOBER 23, 2000

Reviewed for Howard SCD and meets Technical Requirements APPROVED: Howard County Department of Planning and Zoning

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.

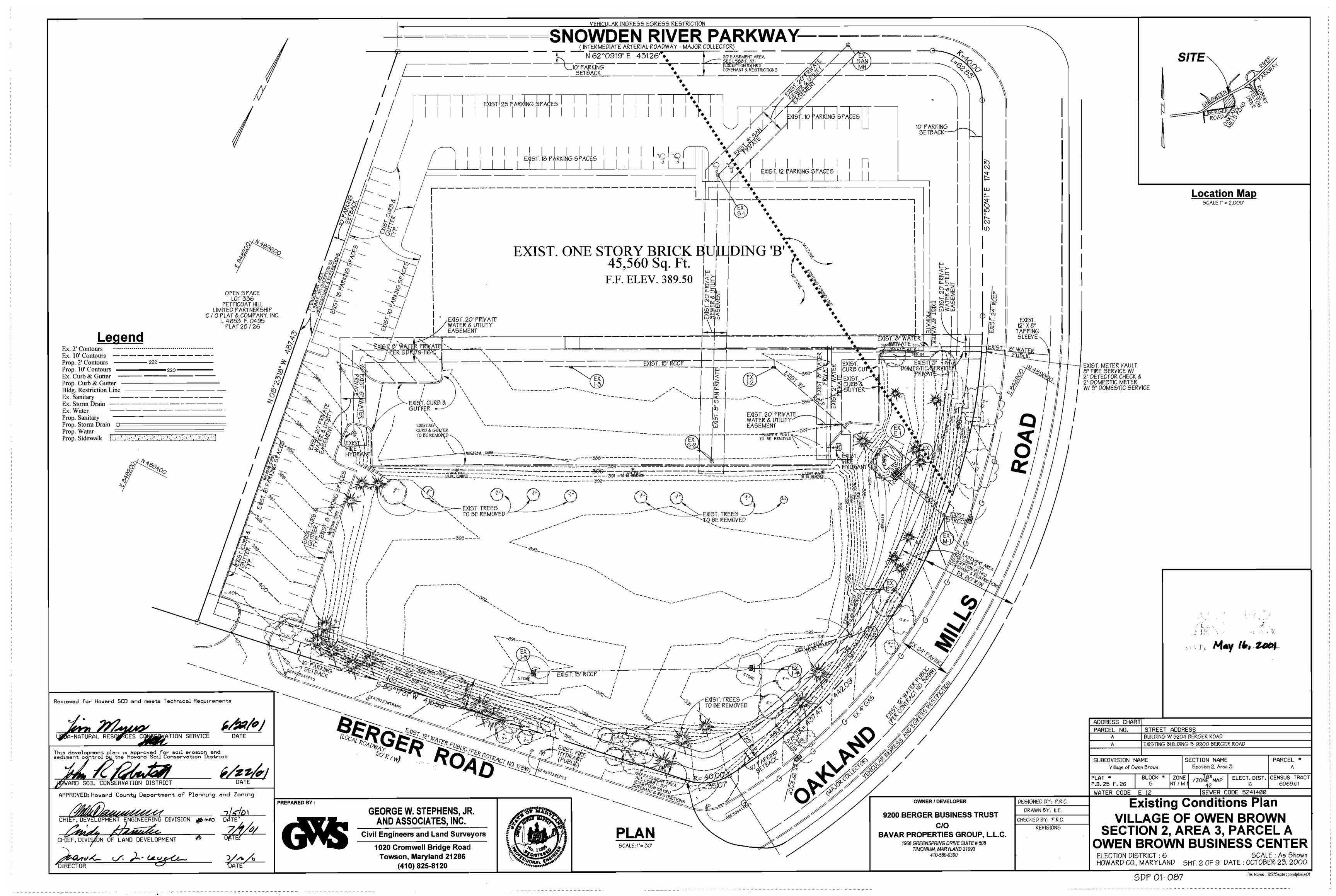
Civil Engineers and Land Surveyors

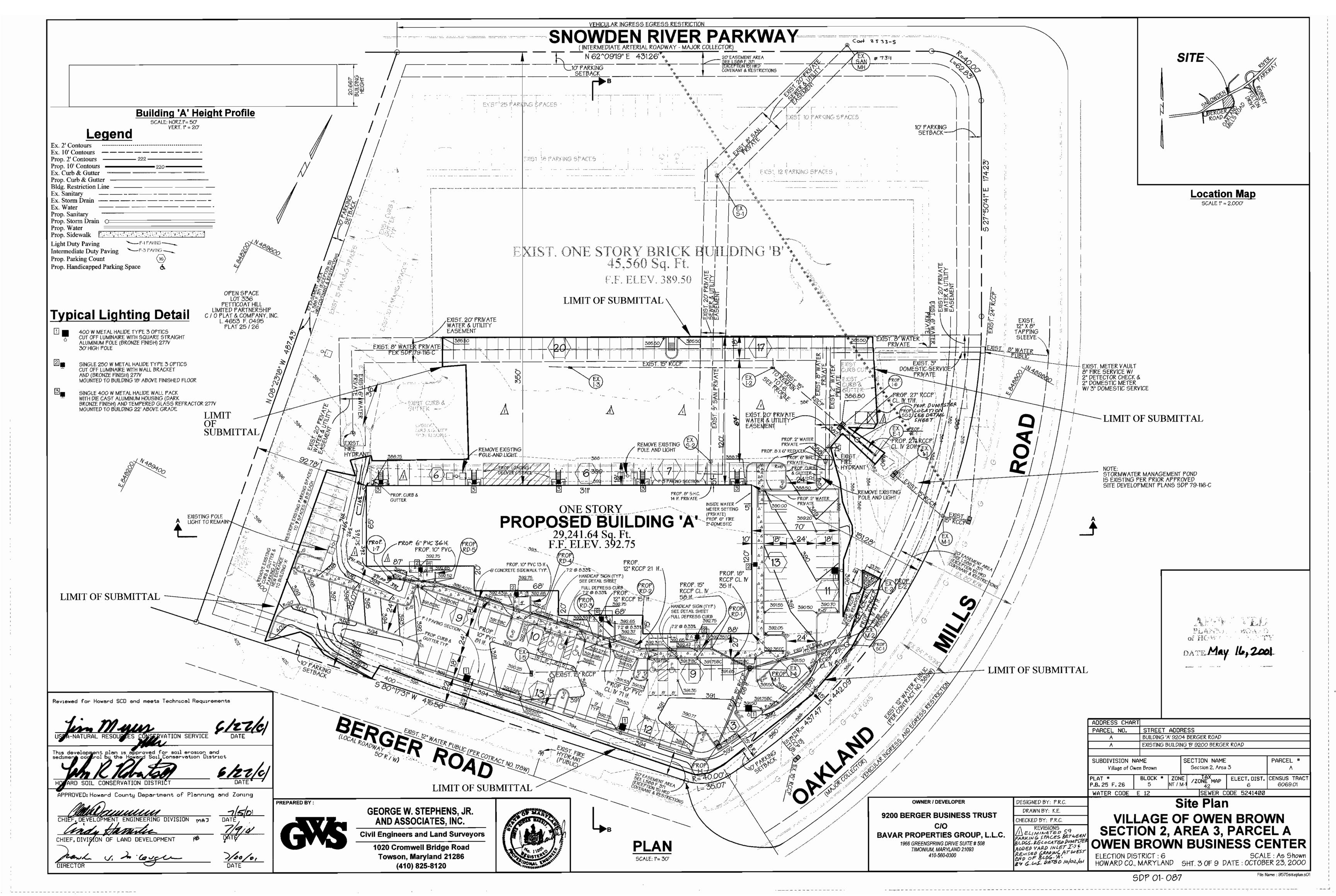
1020 Cromwell Bridge Road Towson, Maryland 21286 (410) 825-8120

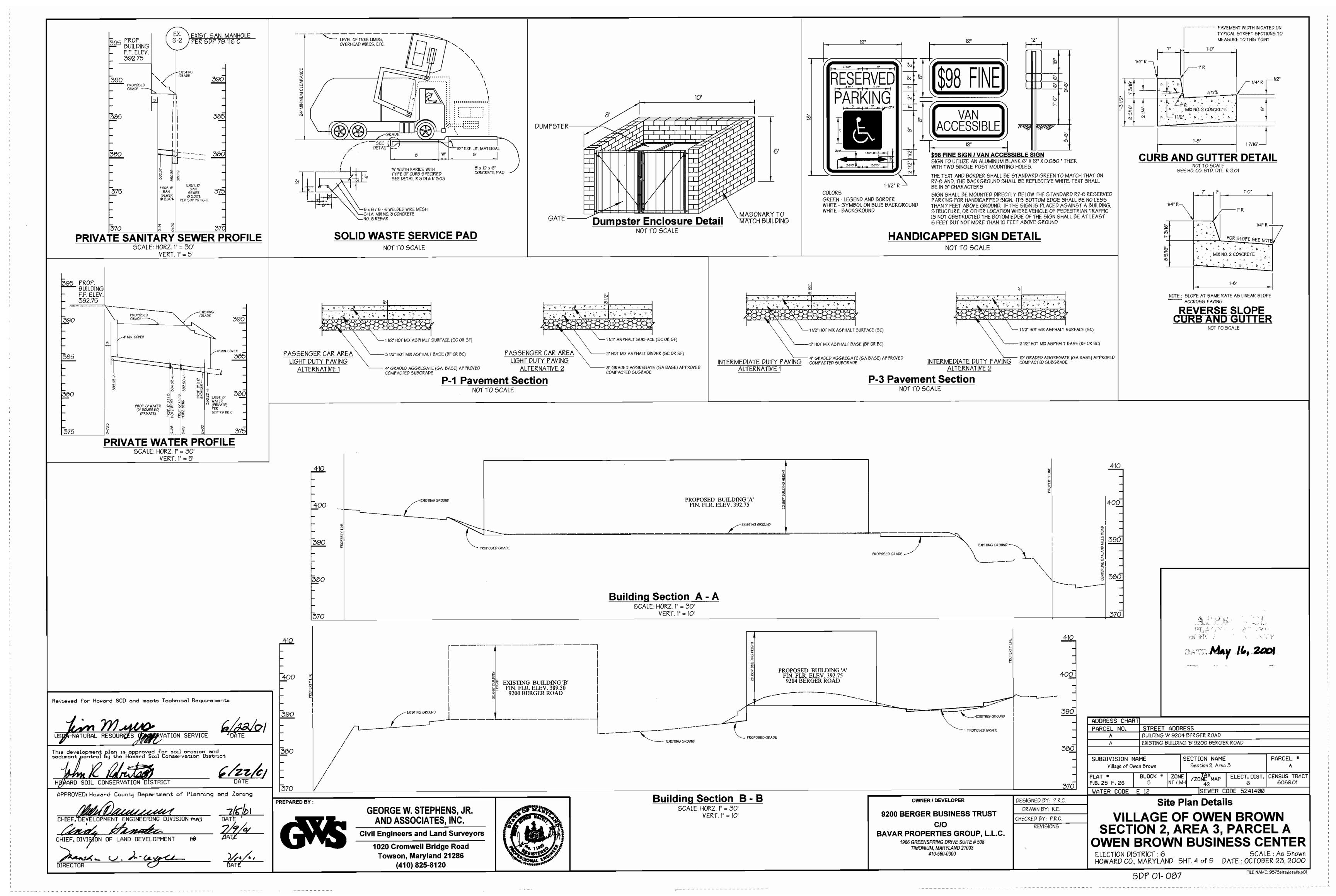


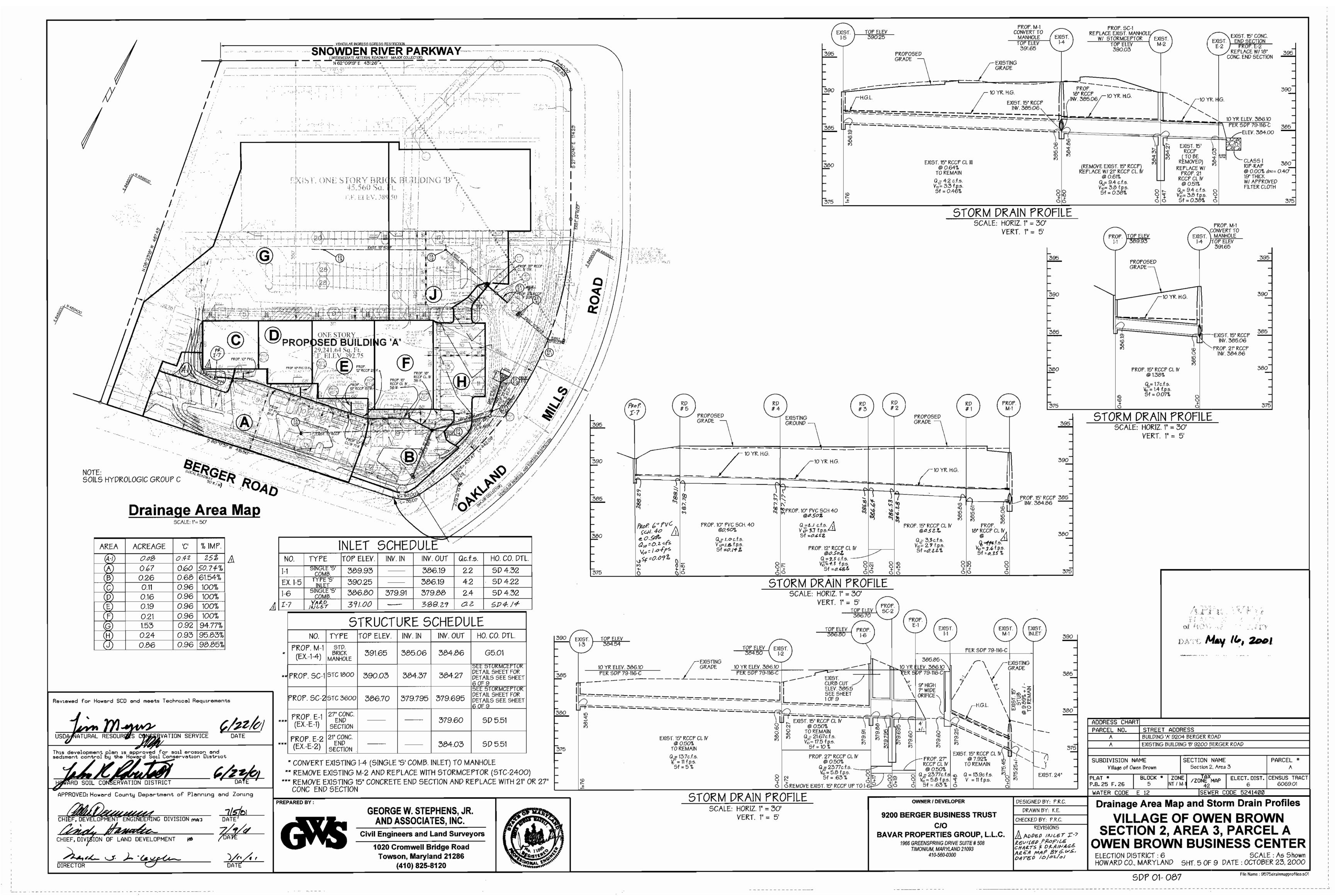
The owner shall provide a separate and independent sewer connection for each tenant or occupant of any building, shown on this site development plan who will discharge non-domestic waste to the public sewerage system if each separate and independent sewer connection shall include a standard manhole and other waste pretreatment devices as required and approved by Howard County. Waste piece on the interior of the building half be designed, constructed as the separate ir modified such that non-domestic waste will be discharged to the separate and independent sewer connection. No tenant or occupant of any building shown on this site development plan shall discharge regulated non-domestic waste to the public sewerage system prior to installation of the separate and independent sewer connection and related interior waste lines. The above

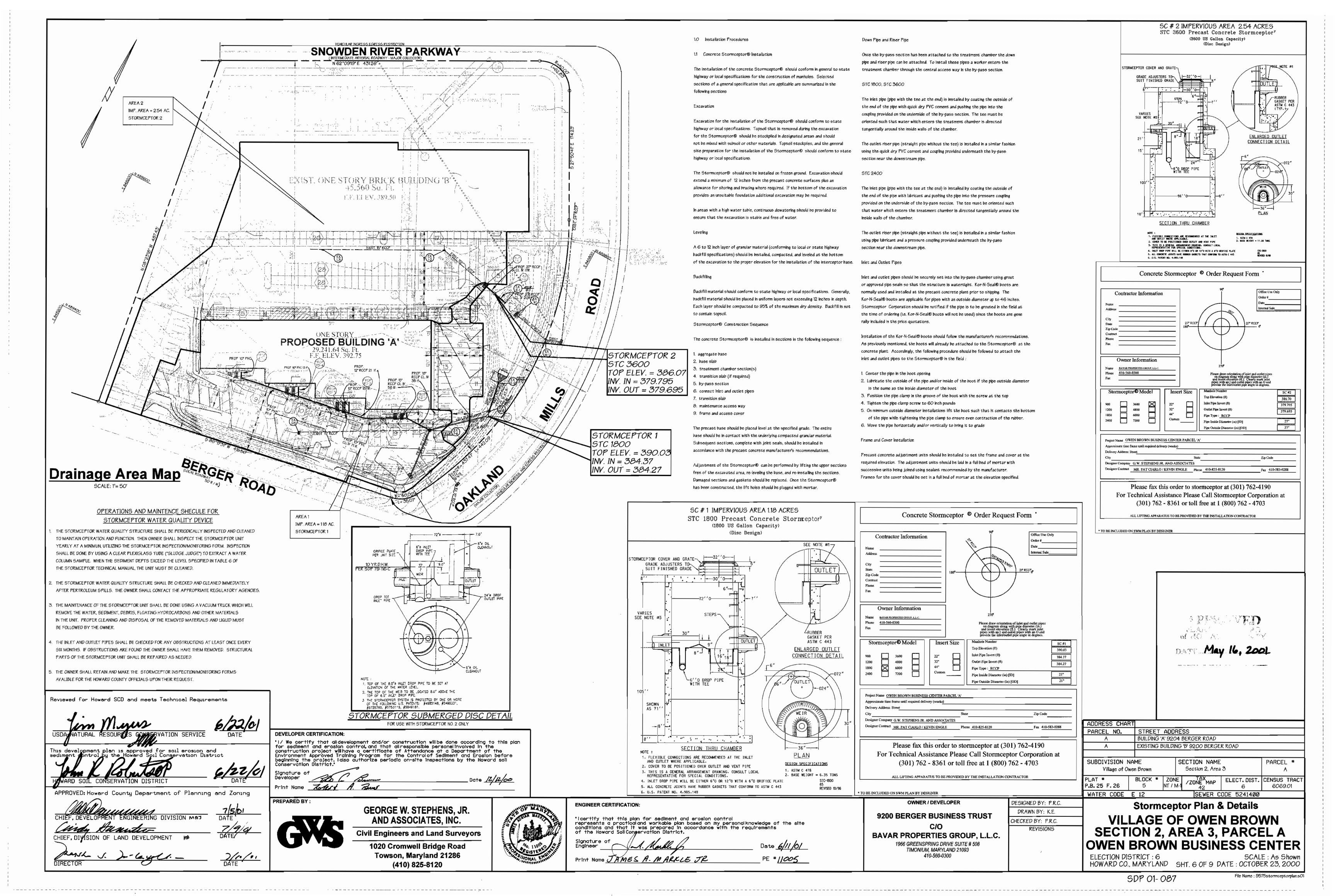
itatement shall apply to all initial and future occupants or tenants.

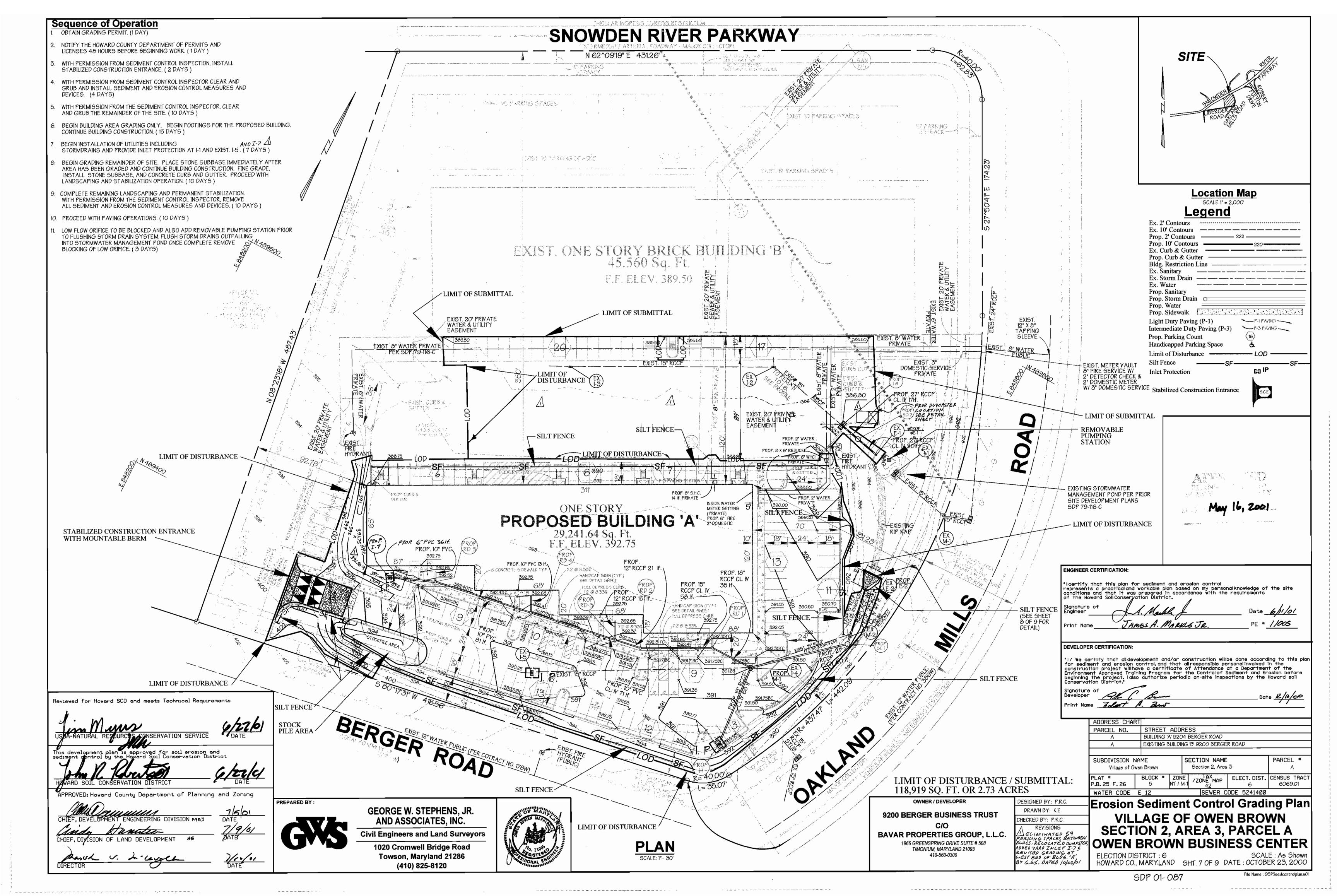












# Stabilization Specifications

Section I - Vegetative Stabilization Methods and Materials

A. Site Preparation

- i. Install erosion and sediment control structures (either temporary or permanent) such as diversions
- arade stabilization structures, borms, waterways, or sediment control basins. Il Perform all grading operations at right angles to the slope. Final grading and shaping is not usually
- iii. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.
- B. Soil Amendments (Fertilizer and Lime Specifications)

necessary for temporary seeding

Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 areas. Soll analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples may be taken for engineering purposes may also be used for chemical analysis

ii. Fertilizers shall be uniform in composition, free flowing and sultable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee of the

- iii. Lime materials shall be ground limestone (hydrated or burnt fime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 98 · 100% will pass through a #20 mesh sieve.
- iv. incorporate time and fertilizer into the top 3 5° of soil by disking or other suitable means
- v Soil Amendments: Use only one of the following schedules
- i. Preferred Apply 2 tons per acre dolomtic limestone (92 bs. / 100 s.f.) and 600 bs. per acre 10-10-10 fertilizer (14 bs. / 100 s.f.) Before seeding, harrow or disc into upper three inches of soli. At time of seeding, apply 400 lbs. per acre 30-0-0 auriform fertilizer (9.1 lbs / 100 s.f.).
- li. Acceptable Apply 2 tons per acre dolomtic limestone (92bs / 1000 s.f.) and 1000 bs. per acre 10 10:10 fertilizer (23 lbs. / 1000 s.f.) before seeding, harrow or disc upper three inches of soil.

### C. Seedbed Preparation

### i. Temporary Seeding

- a. Seedbed preparation shall consist of loosening soil to a depth of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth but left in the roughened condition Sloped areas (greater than 3:1) should not be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
- b. Apply fertilizer and time as prescribed on the plans.
- c. Incorporate lime and fertilizer into the top 3 5° of soil by disking or other suitable means.
- li. Permanent Seeding
- a. Minimum soil conditions required for permanent vegetative establishment:
- 1. Soll pH shall be between 6.0 and 70. 2. Soluble salts shall be less than 500 parts per million (ppm).
- 3 The soil shall contain less than 40% clay but enough fine grained material (> 30% slit plus clay) to
- provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or serecia lespedeza is to be planted, then a sandy soil (<30% slit plus clay) would be acceptable.
- 4. Soll shall contain 1.5% minimum organic matter by weight 5. Soil must contain sufficient pore space to permit adequate root penetration. 6. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with
- Section 21 Standard and Specification for Topsoll. b. Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3 - 5" to permit bonding of the topsoil to the

surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.

- c. Apply soll amendments as per soll test or as included on the plans.
- d. Mix soil amendments into the top 3 5" of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soll in an irregular condition with ridges running parallel to the contour of the slope. The top 1 - 3" of soil should be loose and friable. beedbed loosening may not be necessary on newly disturbed areas

# D. Seed Specifications

- i. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material in this job.
- ii. Inoculant The inoculant for treating legume seed in the seed mixture shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding, NOTE: It is very important to keep inoculant as cool as possible until used. Temperatures above 75 - 80 degrees F. can weaken bacteria and make inoculant less effective.
- NOTE: SEED TAGS SHALL BE MADE AVAILABLE TO THE INSPECTOR TO VERIFY TYPE AND RATE OF SEED USED. E. Methods of Seeding
- i. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fortilizer), broadcast or drop seeder, or a cultipacker seeder
- a If fertilizer is being applied at the time of seeding the application rates amounts will not exceed the following: nitrogen; maximum of 100 lbs per acre total soluble nitrogen; P205 (phosphorus): 200 lbs./ac.; K2O (potassium): 200 lbs./ac.
- b Lime use only ground agricultural limestone. (Up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
- c. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without

Reviewed for Howard SCD and meets Technical Requirements

APPROVED: Howard County Department of Planning and Zoning

INSERVATION SERVICE

### ii. Dry Seeding: This includes use of conventional drop or broadcast spreaders.

- a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 25 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soll contact.
- b Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
- III. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.
- a. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting
- b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

## F. Mulch Specifications (in order of preference)

- t. Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonably bright in color, and shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law
- li. Wood Cellulose Fiber Mulch (WCFM)
- a WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
- b. WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
- c. WCFM, including dye, shall contain no germination or growth inhibiting factors.
- d. WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The muich material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
- e. WCFM material shall contain no elements or compounds at concentration levels that will be phyto-toxic
- f WCFM must conform to the following physical regulrements: fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 4.0 to 8.5, ash content of 16% maximum and water holding capacity of 90% minimum
- NOTE: ONLY STERILE STRAW MULCH SHOULD BE USED IN AREAS WHERE ONE SPECIES
- G. Mulching Seeded Areas Mulch shall be applied to all seeded areas immediately after seeding I if grading is completed outside of the seeding season, mulch alone shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications
- il. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1" and 2". Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
- iii Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs of wood cellulose fiber per 100 gallons of water.
- H. Securing Straw Mulch (Mulch Anchoring): Mulch anchoring shall be performed immediately following mulch Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:
- A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) Inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should be used
- # Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 gounds of wood cellulose fiber per 100 gallons of water
- iii Application of liquid binders should be heavier at the edges where wind catches much such as in valleys and on the crests of banks. The remainder of area should appear uniform after binder application Synthetic binders - such as Acrylic DLR (Argo-Tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.
- ly. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3000 feet long.
- Section II Temporary Seeding egetation - annual grass or grain used to provide cover on disturbed areas for up to 12 months. For

longer duration of vegetative cover, Permanent Seeding is required.

A Seed Mixtures - Permanent Seeding i, selections or more off the species or mixtures listed in Table 25 for the appropriate Plant Hardiness Zone (from figure 5) and enter them in Permanent Seeding Summary below, along with application rates and seeding dates. Seeding depths can be estimated using Table 26. If this Summary is not put on the construction plans and completed, then Table 25 must be put on the plans, Additional

planting specifications for exceptional sites such as shorelines, streambanks, dunes or for special

purposes such as wildlife or asthetic treatment may be found in USDA-SCS Technical Field Office

ii. For sites having disturbed areas over 5 acres, the rates shownon this table shall be deleted and the

Guide, Section 342 - Critical Area Planting, For special lawn maintainance areas, see Sections IV Sod

iii. For areas recieving low maintenance, apply ureaform fertilizer (46-0-0) at 3-1/2 lbs/1000 sq. ft. (150 bs/ac), in addition to the above soil ammendments shown in the table below, to be performed at the

# Section III - Permanent Seeding

DEVELOPER CERTIFICATION:

Sianature of

PREPARED BY

rates recommended by the testing agency shall be written in

- Seeding grass and legumes to establish ground cover for a minimum period of one year on disturbed areas generally receiving low maintenance A. Seed Mixtures - Permanent Seeding
- i. select one or more off the species or mixtures listed in Table 25 for the appropriate Plant Hardiness Zone (from figure 5) and enter them in Permanent Seeding Summary below, along with application rates and seeding dates. Seeding depths can be estimated using Table 26. If this Summary is not out on the construction plans and completed, then Table 25 must be out on the plans. Additional planting specifications for exceptional sites such as shorelines, streambanks, dunes or for special purposes such as wildlife or asthetic treatment may be found in USDA-SCS Technical Field Office Guide, Section 342 - Critical Area Planting. For special lawn maintainance areas, see Sections IV Sod and V Turfgrass.
- II For sites having disturbed areas over 5 acres, the rates shownon this table shall be deleted and the rates recommended by the testing agency shall be written in
- iii. For areas recieving low maintenance, apply ureaform fertilizer (46-0-0) at 3-1/2 ibs/1000 sq. ft. (150 bs/ac), in addition to the above soil ammendments shown in the table below, to be performed at the

I/ We certify that all development and/or construction will be done according to this plan

**GEORGE W. STEPHENS, JR.** 

AND ASSOCIATES, INC.

Civil Engineers and Land Surveyors

1020 Cromwell Bridge Road

Towson, Maryland 21286

for sediment and erosion control, and that all responsible personel involved in the

construction project willhave a certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard soil Conservation District."

# Section IV - Sod: To provide quick cover on disturbed areas (2:1 grade or steeper).

- i. Class of turfgrass sod shali be Maryland or Yirginia State Certified or Approval. Sod labels shali be
- made available to the job foreman and inspector. li. Sod shall be machine cut at a uniform soil thickness of 3/4", plus or minus 1/4", at the time of cutting. Measurement for thickness shall exclude top growth and thatch. Individual pieces of sod shall be cut to the suppliers width and length. Maximum allowable deviation from standard widths and lengths shall
- III. Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
- IV. Sod shall not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
- v. Sod shall be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted

within this period shall be approved by an agronomist or soil scientist prior to its installation

- vi. Site Preparation: Fertilizer and Lime application rates will be determined by soil test. Under unusual circumstances where there is insufficent time for a complete soil test, fertilizer and lime may be applied in amounts shown under vi-b, below.
- a. Prior to sodding, the surface will be cleared of all trash, debris, and of all roots.brush, wire, grade stakes and other objects that would interfere with planting, fertilizing, or maintenance operations.

be 5 percent. Broken pads and torn or uneven ends will not be acceptable.

- b. Where soil is acid or composted of heavy clays, ground limestone will be spread at the rate of 2 tons per acre(100 lbs. / 1000 s.f.). In all soils 1000 lbs. per acre (25 lbs. / 1000 s.f.) of 10-10-10 fertilizer or equivalent will be uniformly
- applied and mixed into the top thre inches of soil with the required time. c. All areas recieving sod will be uniformly fine graded. Hard packed earth will be scarified prior to placement of sod

### B. Sod Installation

C. Sod Maintenance

- i. During periods of excessively high temperature or in areas having dry subsoil, the subsoil shall be lightly irrigated immediately prior to laying the sod.
- ii. The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other i ateral igints shall be staggered to promote more uniform growth and tightly wedged against each other. Lateral joints shall be staggered to promote more uniform growth and

  CROWN VETCH BEST FOR 5b, 6a, 6b

  Strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent

  F. SUITABLE FOR SEEDING IN MID-SUMMER. voids which would cause drying of the roots
- ill. Wherever possible, sod shall be laid with the long edges parallel to the contour and with staggering joints. Sod shall be rolled and tamped, peaged or otherwise secured to prevent slippage on slopes and to ensure solid contact between sod roots and the underlying soil surface
- iv. Sod shall be watered immediately following rolling or tamping until the underside of the new sod pad and soll surface below the sod are thoroughly wet. The operations of laying, tamping and irrigating for any piece of sod shall be completed within eight hours.
- i. in the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4". Watering should be done during the heat of the day to prevent wilting.
- il After the first week, sod watering is required as necessary to maintain adequate moisture content.
- iii. The first mowing of sod should not be attempted until the sod is firmly rooted. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings. Grass height shall be maintained between 2" and 3" unless otherwise specified.

### Section IV - Turfgrass Establishment

Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance. Areas to receive seed shall be tilled by disking or other approved methods to a depth of 2 to 4 inches, leveled and raked to prepare a proper seedbed. Stones and debris over 11/2 inches in diameter shall be removed. The resulting seedbed shall be in such condition that future mowing of grasses will pose no difficulty.

NOTE: Choose certified material, Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.

## A. Turfgrass Mixtures

- l. Kentucky Bluegrass Fall sun mixture For use in greas that receive intensive management. Irrigation required in the areas of central Maryland and eastern shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds/1000 square feet. A minimum of three bluegrass cultivars should be chosen ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.
- II. Kentucky Bluegrass/Perennial Rye Full sun mixture For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/ Certified Kentucky Bluegrass Seeding rate: 2 pounds mixture/1000 square feet. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen, with each cultivar ranging from 10% to 35% of
- III. Tall Fescue/Kentucky Bluegrass Full sun mixture For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes: certified Tall Fescue Cultivare 95 - 100%, certified Kentucky Bluegrass Cultivare 0 - 5%. Seeding rate 5 to 8 b./1000 square feet. One or more cultivars may be blended.
- iv. Kentucky Bluegrass/Fine Fescue Shade Mixture For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes; certified Kentucky Bluegrass Cultivars 30 - 40% and certified Fine Fescue and 60 - 70%. Seeding rate: 11/2 - 3 lbs /1000 square feet. A minimum of 3 Kentucky bluegrass cultivars must be chosen, with each cultivar ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.
- NOTE: Turfgrass varieties should be selected from those listed in the most current University of Maryland Publication, Agronomy Mimeo #77, "Turfgrass Cultivar Recommendations for Maryland".

- Western MD: March 15-June 1, August 1-October 1 (Hardiness Zones 5b, 6a)
- Central MD: March 1-May 15, August 15-October 15 (Hardiness Zones 6b)
- Southern MD, Eastern Shore: March 1-May 15, August 15-October 15 (Hardiness Zones 7a, 7b) C. Irrigation
- If soil moisture is deficient, supply new seedings with adequate water for plant growth (1/2" 1" every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

# D. Repairs and Maintenance

Inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the

I. Once the vegetation is established, the site shall have 95% groundcover to be considered adequately

- II. If the stand provides less than 40% ground coverage, reestablish following original lime, fertilizer, seedbed preparation and seeding recommendations
- ill If the stand provides between 40% and 94% ground coverage, overseeding and fertilizing using half of the rates originally applied may be necessary.
- lv. Maintenance fertilizer rates for permanent seedings are shown in Table 24. For lawns and other medium to high maintenance turfgrass areas, refer to the University of Maryland publication "Lawn Care in Maryland' Bulletin No. 171.

# RECOMMENDED PLANTING DATES IF AVAILABLE) CANADA BLUEGRASS (10 KENTUCKY BLUEGRASS (10 REDTOP (5%) × 5b X X 6b X X TALL FESCUE (85%) PERENNIAL RYEGRASS (10%) KENTUCKY BLUEGRASS (5%) x x RED PESCUE OR CHEWINGS FESCUE (80%) PERENMAL RYEGRASS (20%) TALL RESCUE (85%) OR x x x WEEPING LOVEGRASS (17 73 X X X X X WEEPING LOVEGRASS (2%) SERECIA LESPEDEZA (15%) X X X X X 7a X X POA TRIVIALIS (7%) TALL FESCUE (80% HARD FESCUE (20%) A. USED BY SHA ON SLOPED AREAS, ADD A LEGUME FOR SLOPES > THAN 3:1.

Table 25 - Permanent Seeding for Low Maintenance Areas

B. USED IN MEDIAN AREAS BY SHA. SHADE TOLERANT. C. POPULAR MIX - PRODUCES PERMANENT GROUNDCOYER QUICKLY. BLUEGRASS THICKENS STAND. B BEST USE ON SHADY SLOPES NOT ON POORLY DRAINED CLAYS.

E. USE ON LOW MAINTENANCE, STEEP SLOPES USE TALL FESCUE IN DRAUGHTY CONDITIONS. G. WEEPING LOYEGRASS MAY BE SEEDED WITH TALL FESCUE IN MID-SUMMER. SERECIA LESPEDEZA IS

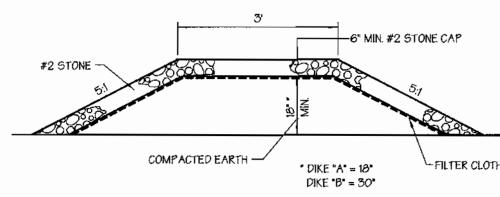
BEST SUITED FOR ZONES 7a AND 7b. H. USE ON POORLY DRAINED SOILS - DITCHES OR WATERWAYS. BIRDSFOOT TREEFOILS BEST FOR ZONES 5b, 6a, ABOVE 2,000 FEET
I USE IN AREAS OF MOIST SHAPE, POA TRIVIALIS THRIVES IN WET SHAPY AREAS. J. TALL FESCUE MAY BE SEEDED ALONE. THE HARD FESCUE PROVIDES BETTER SHADE TOLERANCE AND PRODUCES A BETTER STAND. K LOW FERTILITY GRASS. REQUIRES INFREQUENT MOWING, GOOD COMPANION FOR WILDFLOWERS.

PERMANENT SEEDING RATES (10-20-20)90LB/AC 175 LB/AC 175 LB/AC 2 TONS/AC (4 O LB/1000 S.F.) (4.0 LB/1000 S.F.) (100 LB/1000 5 F.)

FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES THE RATES SHOWN ABOVE FOR PERMANENT SEEDING SHALL BE DELETED AND THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY SHALL BE USED. SOIL TESTING SHALL BE PERFORMED AT THE TIME OF FINE GRADING AND THE RESULTS SHALL BE FURNISHED TO THE SEDIMENT CONTROL INSPECTOR

# **Sediment Control Notes**

- 1. A MINIMUM OF 48 HOURS NOTICE MIGST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855). 2 ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE
- 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO 3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
- A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3.1,
- B) 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. 4. IF REQUIRED BY SEDIMENT CONTROL INSPECTOR SEDIMENT TRAPS/BASINS
- SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH YOU. 1. CHAPTER 7. OF HE HOWARD COUNTY DESIGN MANUAL STORM DRAINAGE. 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL! FOR PERMANENT SEEDING, SOD TEMPORARY SEEDING AND MULCHING (SEC. G). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT
- ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES. 6 ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. 7 SITE ANALYSIS:
- TOTAL AREA OF SITE 6.584 ACRES, LIMIT OF SUBMISSION 2.73 AC. AREA DISTURBED 2.73 ACRES 118,919 Sq. Ft. AREA TO BE ROOFED OR PAVED 1.49 ACRES AREA TO BE VEGETATIVELY STABILIZED 20,909 SQ. FT. OR 0.48 ACRES
- TOTAL CUT 3,377 C.Y. TOTAL FILL 100 C.Y (INCLUDES 15% COMPACTION) OFFSITE WASTE/BORROW AREA LOCATION : EXCESS OUT SHALL
- BE TAKEN TO A SITE WITH AN OPEN GRADING PERMIT. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST. BE REPAIRED ON THE SAME DAY OF DISTURBANCE 9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR 10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES. APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS. BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION
- AGENCY IS MADE. 11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY. WHICHEVER IS SHORTER.



# **Stone Mountable Berm**

Permanent Seeding

# **Fertilizer Rates**

epresents a practical and workable plan based on my personal knowledge of the site

fertilizer Rate (10 10-10)	Lime Rate	Fertilizer Rate (10-20-20)			Lir Ra
		N	P205	K20	
600 lblac bl/1000 s.f.)	2 Tons/ac (100lb/1000 s.f.)	90 b/ac (2.0b/ 1000 s.f.)	175 lb/ac (4 Ob/ 1000 s.f.)	175 blac (4.0bl 1000 s.f.)	2 to (10 100

r staples at top and mid-section and shall meet the following requirement. 50 lbs/fn (min.) Test: MSMT 50'
20 lbs/fn (min.) Test: MSMT 50'
0.3 gai ft / minute (max.) Test: MSMT 3'
Test: MSMT 3. Where ends of geotextile fabric come together, they shall be overlapped, 4.5iif Fence shall be inspected after each rainful event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height. U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF SAVIBONMENT U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE E - 16 - 34 WATER MANAGEMENT ADMINISTRATION SOIL CONSERVATION SERVICE E - 16 - 34 WATER MANAGEMENT ADMINISTRATION DETAIL 20A - REMOVABLE PUMPING STATION NOTE: This measure must be located where it will be readily accessible to allow for it's practicle usage. STANDARD SYMBOL 🔀 RPS 2000 0000 0 0 0 0 CLEAN GRAVEL 0 0 0 0 0 0 0 0 WAX.DRAINAGE AREA - 1/4 ACR 000 000 C 0 0 i. Attach a continuous piece of wire mesh (30° minimum width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard 0 0 0 0000 ELEVATION (CUT AWAY) Construction Specifications 2. After Installing the outer pipe, backfill around outer pipe with 2° aggregate or clean aroval. 4. The center pipe should extend 12" to 18" above the anticipated water surface elevation or riser crest elevation when dewatering a basin.

DETAIL 22 - SILT FENCE

PERSPECTIVE VIEW 36" MINIMUM FENCE—

TOP VIEW A MINIMUM OF 8" VERTICALLY

Construction Specifications

i. Fence posts shall be a minimum of 36 long driven 16 minimum into the ground. Wood posts shall be 1½° x 1½° square (minimum) out, or 1¾° diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be

ECTION A

STAPLE

JOINING TWO ADJACENT SILT

FENCE SECTIONS

S MINIMUM DEPTH IN

STANDARD SYMBOL

CROSS SECTION

3. Securely nall the 2°x 4" weir to a 9" long vertical spacer to be located between the weir and the iniet face (max. 4" apart). 4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2' x 4' to the top of the welr at spacer locations). These 2' x 4' anchors shall extend across the inlet top and be held in place by sandbags or alternate weight. The assembly shall be placed so that the end spacers are a minimum I' beyond both ends of the throat opening. 6. Form the  $\frac{1}{2}$ ° x  $\frac{1}{2}$ ° wire mesh and the geotextile fabria to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean  $\frac{1}{2}$ ° x  $\frac{1}{2}$ ° stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile. 7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment. Assure that storm flow does not bypass the inlet by Installing a temporary earth or asphalt dike to direct the flow to the inlet.

6' MAXINUM SPACING

Construction Specifications

WIRE WESH 2 X 4 WEIR

SILT FENCE

Slit Fence Design Criteria

Slope Length

125 feet

100 feet

60 feet

40 feet

Slope Steepness

Flatter than 50:

10d to 5d

3:1 to 2:1

illt Fence Length

1.000 feet

750 feet

500 feet

250 feet

125 feet

SCE 1. Length - minimum of 50' (\*30' for single residence iat). 2. Width - 10' minimum, should be flared at the existing road to provide a turning 3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. \*\*The plan approval authority may not require single family residences to use geotextile. 4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance. 5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe Installed through the stabilized construction entrance shall be protected with a mountable berm with 5il slopes and a minimum of 6' of stone over the pipe. Pipe in to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6' minimum will be required. 6. Location - A stabilized construction entrance shall be located at every point U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONS SOIL CONSERVATION SERVICE F - 17 - 3 VATER MANAGEMENT ADMINISTRATIC CURB INLET PROTECTION (COG OR COS INLETS) DETAIL 23B - AT GRADE INLET PROTECTION PLAN/CUT AWAY VIEW --GEOTEXTILE CLASS ! ----WIRE TIES ----6' OVERLAN CROSS SECTION MAX. DRAINAGE AREA - 1/4 ACRE

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANG

PROFILE

IO' MINIMUM \ WIOTH

PLAN VIEW

" GEOTEXTILE CLASS 'C' -/

-EXISTING GROUND

STANDARD SYMBOL

Construction Specifications Lift grate and wrap with Geotextile Class E to completely cover oil apenings, 2. Place ¾ to 1½ stone, 4-6 thick on the grate to secure the fabric and U.S. DEPARTMENT OF AGRICULTURE FAGE MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT U.

TYPICAL SILT FENCE INSTALLATION

PIPE OUTFALL

SILT FENCE OUTFALL PROTECTION

BRITIAL LOCATION OF SILT FENC

### 24.0 MATERIALS SPECIFICATIONS Table 27 Geotextile Fabrics

CLASS	APPARENT OPENING SIZE MM. MAX.	GRAB TENSILE STRENGTH LB. MIN.	BURST STRENGTH PSI. MIN.
A	0.30 **	250	500
В	0.60	200	320
С	0.50	200	320
D	0.60	90	145
E	0.30	90	145
F (SILT FENCE)	0.40-0.80*	90	190

\* US Std. Sleve CW-02215 \*\* 0.50 MM, MAX, FOR SUPER SILT FENCE The properties shall be determined in accordance with the following procedures: - Apparent opening size MSMT 323

principal directions of geotextile fabric. Burst strength ASTM D 3786

The fabric shall be inert to commonly encountered chemicals and hydrocarbons, and will be rot and mildew resistant. It shall be manufactured from fibers consisting of long chain synthetic polymers, and composed of a minimum of 85% by weight of

in addition, Classes A through E shall have a 0.01 cm./sec. minimum permeability when tested in accordance with MSMT 507.

and an apparent minimum elongation of 20 percent (20%) when tested in accordance with the grap tensile strength requirements

-Grab tensile strength ASTM D 1682: 4 x 8" specimen, 1x2" clamps, 12" /min. strain rate in both

Class F geotextile fabrics for silt fence have a 50 lb./in. minimum tensile strength and a 20 lb./in. minimum tensile modules when ested in accordance with MSMT 509. The material shall also have a 0.3 gal./ft. /min. flow rate and seventy-five percent (75%) inimum filtering efficiency when tested in accordance with MSMT 322.

Table 26 - Temporary Seeding

Rates, Depths, and Dates

Geotextile fabrics used in the construction of silt fence shall resist deterioration from ultraviolet exposure. The fabric shall contain sufficient amounts of ultraviolet ray inhibitors and stabilizers to provide a minimum of 12 months of expected usable construction life at a temperature range of O to 120 degrees F.

# SPECIES PER ACRE CHOOSE ONE BARLEY OATS RYE 150 lbs. FOXTAIL MILL WEEPING LOYEGRASS ANNUAL RYEGRASS

STREET ADDRESS PARCEL NO. BUILDING 'A' 9204 BERGER ROAD EXISTING BUILDING 'B' 9200 BERGER ROAD SUBDIVISION NAME SECTION NAME PARCEL # Village of Owen Brown Section 2, Area 3 | ELECT. DIST. | CENSUS TRAC P.B. 25 F. 26 WATER CODE E 12 SEWER CODE 5241400

**Erosion & Sediment Control Notes & Details** VILLAGE OF OWEN BROWN **SECTION 2, AREA 3, PARCEL A OWEN BROWN BUSINESS CENTER ELECTION DISTRICT: 6** 

OWNER / DEVELOPER

115 1/2

50 bs.

9200 BERGER BUSINESS TRUST

**BAVAR PROPERTIES GROUP, L.L.C.** 1966 GREENSPRING DRIVE SUITE # 508 TIMONIUM, MARYLAND 21093 410-560-0300

DESIGNED BY: P.R.C. DRAWN BY: K.E. CHECKED BY: P.R.C. **REVISIONS** 

FILE NAME: 9575sedcontroldetails.s01

ADDRESS CHART

HOWARD CO., MARYLAND SHT. 8 of 9 DATE: OCTOBER 23, 2000

(410) 825-8120

icertify that this plan for sediment and erosion control

ENGINEER CERTIFICATION:

